

FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554
NOV 2 2000

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G-1000, OMD

OFFICE OF
MANAGING DIRECTOR

Phillip L. Spector, Esq.
Paul, Weiss, Rifkind, Wharton & Garrison
1615 L Street, N.W.
Washington, D.C. 20036-5694

RE: Request for Waiver and Deferral of
Application Fees, SpaceData International, LLC
Fee Control No. 00000CDMC-00-0001
Amount Due: \$30,000.00

Dear Mr. Spector:

This is in response to SpaceData International, LLC's ("SDI's") request for waiver and deferral of fees related to its application for a license under Sections 301 and 303(c) of the Communications Act to operate on a time-share basis five identical space stations, and to utilize associated government radio frequencies.¹ The space stations comprise the Tracking and Data Relay Satellite System ("TDRSS") operated by the National Aeronautics and Space Administration ("NASA").

SDI's arrangement with NASA is the result of NASA's active engagement in the further commercialization of several of its activities pursuant to direction from the Administration and Congress.² As detailed in the request, SDI proposes to use the capacity of NASA's TDRSS satellites on a preemptible basis to transmit geological and seismic data from ocean-going seismic exploration vessels through NASA's control center in White Sands, New Mexico to data processing centers in the United States for subsequent

¹ As jointly directed by NASA, NTIA and the Commission, SDI filed an application to operate the five TDRSS satellites for which a fee of \$89,460 per space station is required.

² See SDI Petition for Waiver, Exh. 3 (Letter from Mr. Joseph H. Rothenberg, Associate Administrator for Space Flight, NASA, to Mr. Frank Van Rensselaer, Chief Executive Officer, SDI, dated July 20, 2000).

commercial service. Although SDI will be responsible for ensuring that its service complies with Commission rules, NASA will directly control operation of the TDRSS satellites at all times. The Commission has granted SDI Special Temporary Authority to operate its system, pending approval of the underlying application.

You first request that we waive the fees associated with your application based on financial hardship and have filed supporting documentation with your request. You also request waiver of the fees because you believe only minimal Commission resources will be required to process SDI's application. You further request that we defer the application fees until disposition of the waiver request.

Congress has authorized the Commission to "waive or defer payment of an application fee in any specific instance for good cause shown, where such action would promote the public interest." 47 U.S.C. § 158(d)(2); *see also* 47 CFR § 1.1117(a). The Commission has found that in certain instances a "compelling case of financial hardship" may constitute good cause for waiver of required fees. *See Implementation of Section 9 of the Communications Act*, 10 FCC Rcd 12759, 12762 (1995). In determining whether an applicant has sufficient revenues to pay required fees, the Commission does not look simply at an entity's profits. Thus, although deductions for amortization and depreciation and payments to principals reduce gross income for tax purposes, those deductions also represent money that is considered to be available to pay the required fee. To the extent that an applicant found that it had sufficient funds to make payments to principals in the amount of the required fees, as in this instance, the Commission will find that the applicant had sufficient funds to pay required fees. Therefore, your request for waiver on the basis of financial hardship is denied.

However, the unique nature of the circumstances related to SDI's proposed operation does warrant further Commission consideration. SDI's proposed use of excess capacity on NASA's five TDRSS satellites involves only SDI's operation of SDI-owned transmit-receive earth stations aboard non-US flagships. These earth stations are not licensed by the Commission. Further, these satellite earth stations will operate in government frequencies only. Therefore, under normal circumstances, jurisdictional authority to

license SDI's proposed access to the TDRSS satellites via their earth stations, using only government frequencies, would rest with the National Telecommunication Information Administration ("NTIA"), not the Commission. NTIA has stated, however, that it believes SDI may not use government frequencies without authorization from the FCC. *See* 47 U.S.C. § 903(e). Consequently, as a result of deliberations between NTIA, the Commission and NASA, SDI was directed to file for authorization for a consolidated license to operate the NASA TDRSS space stations.

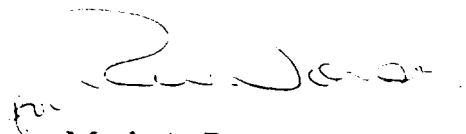
In these unique circumstances, and consistent with congressional policies encouraging use of such commercial uses of government frequencies, we believe that a fee waiver is warranted. Therefore, a partial waiver of the required fees is granted and SDI is directed to remit application fees in the amount of \$30,000 for this application.

You also request deferment of the application fees until disposition of the waiver request. Your request for deferment is granted. Your fee obligation is deferred to thirty days from the date of this letter.

Payment in the amount of \$30,000 must be submitted together with a Form FCC 159 (copy enclosed) within 30 days from the date of this letter. A late charge penalty of 25% will be assessed and due if the Commission does not receive full payment 30 days from the date of this letter. Failure to submit payment may result in further sanctions, including but not limited to, dismissal of pending applications and the initiating of a proceeding to recover the unpaid fee amount, late charge penalty, and interest pursuant to the provisions of the Debt Collection Improvement Act of 1996.

If you have any questions concerning this letter, please call the Credit & Debt Management Group at 418-1995.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark A. Reger", is written over a horizontal line.

Mark A. Reger
Chief Financial Officer

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Space System License, Inc.,)
)
Motorola Pacific Communications, Inc.,)
)
and)
)
Motorola Satellite Communications, Inc.)
)
Request for Waiver of Regulatory)
Fees for Fiscal Year 2000)
_____)

File No. _____

To: Managing Director

EXPEDITED CONSIDERATION REQUESTED

**WAIVER REQUEST FOR
FISCAL YEAR 2000 REGULATORY FEES**

I. INTRODUCTION

Space System License, Inc., Motorola Pacific Communications, Inc., and Motorola Satellite Communications, Inc. (collectively, "Motorola"), by their attorneys and pursuant to 47 U.S.C. § 159(d) and 47 C.F.R. § 1.1166, hereby request a waiver of the fiscal year 2000 regulatory fees for the licenses listed in Attachment A.

Motorola seeks a regulatory fee waiver for its space and earth station authorizations obtained in connection with the operation of the Iridium system, a constellation of 66 satellites designed to provide two-way voice and data communications around the world via mobile handsets. As the Commission is aware, the Iridium system is no longer an operating

satellite system: Iridium, LLC ("Iridium") has ceased providing services to its customers and is winding down its operations consistent with the decision of the United States Bankruptcy Court for the Southern District of New York, attached hereto as Attachment B. Motorola is also in the process of decommissioning all of the active satellites in the Iridium system constellation. For the reasons set forth below, the public interest would be served by waiving Motorola's regulatory fee payments for a service that no longer exists.¹

II. THE REQUESTED WAIVER SERVES THE PUBLIC INTEREST

Congress has authorized the Commission to waive its regulatory fees "in any specific instance for good cause shown, where such action would promote the public interest."² In interpreting this statutory provision, the Commission has held that it would grant requests for regulatory fee waivers in "extraordinary and compelling circumstances only, upon a showing that such action overrides the public interest in reimbursing the Commission for its regulatory

¹ In comments submitted earlier this year, Motorola argued that its Iridium system authorizations should not be counted as "payment units" for purposes of calculating the regulatory fees due for the relevant services – in this case non-geostationary satellite and related Earth station services, and that Motorola should not be required to pay regulatory fees for any service that ceases to operate prior to the date on which the regulatory fees are due. See Comments of Motorola filed in MD Docket No. 00-58 (Apr. 24, 2000). In its recent Fiscal Year 2000 Report and Order, the Commission stated that it would not resolve the issues raised by Motorola in its comments, but that Motorola could file a request for a regulatory fee waiver pursuant to the Commission Rules. See *In the Matter of Assessment and Collection of Regulatory Fees for Fiscal Year 2000*, Report and Order, MD Docket No. 00-58, ¶ 36 (rel. July 10, 2000).

² 47 U.S.C. § 159(d).

costs."³ Such circumstances exist in this case and justify favorable Commission action on the instant request.

Under the Commission's Rules, earth station licensees who hold authorizations as of October 1 of the preceding calendar year are normally obligated to pay the requisite annual regulatory fees, which are designed to cover the costs of regulatory oversight and policy decisions affecting a licensee.⁴ For non-geostationary, low-earth orbit space station licensees, the Commission requires payment once the licensee has certified that it has at least one operating satellite.⁵ This Commission policy, however, assumes that a licensee who holds its authorization as of the preceding October (or a space station licensee who has certified that a satellite is operational) will continue to provide service throughout the remainder of the year. In fact, the Commission recognized the forward-looking nature of its regulatory fees in the *1994 Regulatory Fee Order*: "We have selected October 1 as the date for calculating these fees since October 1 is the first day of the fiscal year and, therefore, current licensees subject to the fees would have benefited from our regulatory activities *since the beginning of the period covered by their payment*."⁶ This is not the case here.

³ See *In the Matter of Implementation of Section 9 of the Communications Act Assessment and Collection of Regulatory Fees for the 1994 Fiscal Year*, 9 FCC Rcd. 5333, ¶ 29 (1994) ("*1994 Regulatory Fee Order*").

⁴ *1994 Regulatory Fee Order*, ¶ 48.

⁵ *1994 Regulatory Fee Order*, ¶ 92; *In the Matter of Assessment and Collection of Regulatory Fees for Fiscal Year 1999*, MD Docket No. 98-200, ¶ 64 (rel. March 24, 1999).

⁶ *1994 Regulatory Fee Order*, ¶ 48 (emphasis supplied).


As the Commission is well aware, Iridium is winding up its business as a result of a liquidation order by a bankruptcy court. As of March 18, 2000, the Iridium system satellites and associated earth stations for which Motorola remains the licensee ceased providing fee-based services to any customers and has not received any revenues or other income from operations of the Iridium system. Since that time, Motorola has only provided services for mission critical activities – primarily for government users. It is now in the final stages of preparing its plans for decommissioning the entire constellation. Accordingly, there will no longer be any need for regulatory oversight over the licenses, the essential *quid pro quo* for paying regulatory fees. Further, Motorola has not received any income from operating and maintaining the Iridium system for well over a year, and, as of March 18, 2000, there have been no revenues or other income generated from operations of the Iridium system from which to pay any regulatory fees.

Thus, it would not be equitable or otherwise in the public interest to require Motorola to pay the fiscal year 2000 regulatory fees associated with the authorizations for the Iridium system. At a minimum, Motorola requests that the Commission prorate the fiscal year 2000 regulatory fees otherwise due this month to the few months that the Iridium system was, in fact, fully operational, *i.e.*, October, 1, 1999 through March 17, 2000.

III. CONCLUSION

For the foregoing reasons, Motorola respectfully requests that the Commission waive the fiscal year 2000 regulatory fees due for those authorizations listed on Attachment A.

Respectfully submitted,



Michael D. Kennedy
Corporate Vice President and Director,
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Telecommunications Policy
Barry Lambergman
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*Counsel for Space System License, Inc.,
Motorola Pacific Communications, Inc.,
and Motorola Satellite Communications,
Inc.*

September 20, 2000

EXHIBIT A

Licensee	Call Sign/File No.
Space System License, Inc.	9-DSS-P-91(87) CSS-91-010 43-DSS-AMEND-92 15-SAT-LA-95 16-SAT-AMEND-95
Motorola Pacific Communications, Inc.	E980049
Motorola Satellite Communications, Inc.	E960272 E960244

August 4, 2000

MEMORANDUM

To To the Persons Listed Below

From Phillip L. Spector
Laura B. Sherman

Subject SpaceData Application

We have filed with the Federal Communications Commission today the following documents: 1) SpaceData's application to operate TDRSS; 2) an application for Special Temporary Authority to operate TDRSS on a limited basis for six months; and 3) a request for a waiver and deferral of the filing fee associated with the operational application. Copies of these documents are enclosed for your information.

Thank you all for your help in finding a path that will enable SpaceData to commence service. We look forward to seeing the public notice on the application and a speedy grant of the STA and the experimental license.

Regards.

cc: Frank Van Rensselaer
Jay Gnowles
Wil Zarecor

2000 AUG -4 P 3:53

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August 4, 2000

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*NOT AN ACTIVE MEMBER OF THE DC BAR.
**ADMITTED IN FRANCE ONLY.

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Request for Special Temporary Authority
to Operate NASA Satellites

Dear Ms. Salas:

SpaceData International LLC ("SDI") is seeking a license, under Sections 301 and 303(c) of the Communications Act, 47 U.S.C. §§ 301, 303(c), to operate on a time-share basis five identical radio stations, comprising the Tracking and Data Relay Satellite System ("TDRSS"), operated by the National Aeronautics and Space Administration ("NASA"), and the authority to utilize the associated radio frequencies. In this connection, SDI has today filed an application with the Federal Communications Commission ("FCC" or the "Commission"), a copy of which is attached as Appendix 1 to this letter (the "License Application"). If the Commission approves this application, SDI will provide seismic exploration vessels, which generate tremendous quantities of data while surveying the ocean floor, with high-speed, high-volume transmission of data from such vessels to data processing centers in the United States, through a service called SeismicStar.

Ms. Magalie Roman Salas
August 4, 2000

2

It is urgent that SDI begin testing SeismicStar immediately to demonstrate that it is a technically feasible service. SDI has not tested SeismicStar under actual ocean conditions. SDI currently has an arrangement with an operator of seismic exploration vessels, which is willing to let SDI test SeismicStar on board one of its vessels if testing can begin now. If SDI loses this opportunity to demonstrate its system, it will essentially be forced to cease operations.

In light of the time it will take to process the License Application, SDI requests a grant of Special Temporary Authority to operate SeismicStar immediately for testing and demonstration but only on a limited number of ships and for a limited period of time. Operations will be limited to testing on no more than three vessels operating for a period of six months.

During this six-month period, SDI will carry out experimentation and development required to determine if SeismicStar is technically feasible. The program of experimentation is described in detail in the statement of Wil Zarecor, SDI's Chief Technology Officer, appended as Appendix 2. SDI is submitting a facsimile copy of Appendix 2. An original, signed copy will be submitted to the Commission as soon as possible.

For the reasons set forth above, SDI respectfully requests grant of Special Temporary Authority to operate TDRSS for use by up to three vessels in the Atlantic Ocean until the earlier of the grant of its operational license or six months from the grant of the STA.

Respectfully submitted,

SPACE DATA INTERNATIONAL LLC

By: 

Phillip L. Spector
Laura B. Sherman
Its Attorneys

**Before the
Federal Communications Commission**

In the Matter of)
the Application of)
)
Space Data International LLC)
)
For Authority to Operate)
On a Time Share Basis NASA's)
Tracking and Data Relay)
Satellite System)

File No. _____

APPLICATION OF SPACE DATA INTERNATIONAL LLC

SpaceData International LLC ("SDI"), a limited liability company organized under the laws of Delaware, hereby requests Commission authority, pursuant to Sections 301 and 303(c) of the Communications Act, 47 U.S.C. §§ 301, 303(c), to operate on a time-share basis five identical radio stations, comprising the Tracking and Data Relay Satellite System ("TDRSS"), operated by the National Aeronautics and Space Administration ("NASA"), and to utilize the associated radio frequencies. If the Commission approves this application, SDI will provide seismic exploration vessels, which generate tremendous quantities of data while surveying the ocean floor, with the heretofore unavailable capability to transmit such data from such vessels to data processing centers in the United States. By utilizing TDRSS, SDI would provide a service that shortens by weeks, if not months, the period of time typically required to transmit seismic data. This, in turn,

would greatly expedite the commencement (and completion) of the processing of such data, which would reduce the costs of the industries that utilize such data (in particular the oil and gas industries) and, ultimately, the costs incurred by U.S. consumers.

I - DESCRIPTION OF THE APPLICANT

The applicant is a limited liability company organized under the laws of the State of Delaware. SDI was formed in 1998 for the purpose of providing seismic exploration vessels with access to high-speed, high-volume data transfers. As described in Exhibit 1, all of the members (equity owners) of SDI holding more than a 10% equity interest are US citizens, as are all of its officers and directors.

II - DESCRIPTION OF TDRSS RADIO STATIONS AND ASSOCIATED FREQUENCIES

Three TDRSS satellites are positioned over the Atlantic Ocean Region ("AOR") portion of the orbital arc, at 41 degrees West Longitude, 45 degrees West Longitude, and 47 degrees West Longitude, respectively. Two TDRSS satellites are positioned over the Pacific Ocean Region ("POR") portion of the orbital arc, at 171 degrees West Longitude and 174 degrees West Longitude, respectively. (An additional satellite is positioned over the Indian Ocean Region ("IOR") portion of the orbital arc at 185 degrees West Longitude but SDI does not plan to operate via this satellite.) These satellites are used by NASA and other government agencies to provide global tracking and data relay services. TDRSS has been fully coordinated through the international process. The placement of these satellites in the AOR and POR allows SDI to achieve global coverage for its data relay service. As described in Section III, SDI will use these space stations to transmit data from ocean-going vessels to NASA's facility in White Sands, New Mexico.

Signals transmitted from each space station to the vessels utilize a frequency band from 13747.9 MHz to 13802.0 MHz with the mean maximum effective radiated power (nominal EIRP) from the antenna of 53 dBW. These signals have both a frequency deviation and necessary bandwidth of 2.4 MHz. Signals transmitted from each space station to NASA's White Sands complex utilize frequency bands from 13412.8 MHz to 13643.9 MHz and from 13812.8 MHz to 14043.9 MHz. The mean maximum effective radiated power from each antenna is 56 dBW, and each antenna transmits signals having both a frequency deviation and necessary bandwidth of 69 MHz.

Signals received by each space station from the vessels utilize a frequency band from 14887.8 MHz to 15118.9 MHz, with the mean maximum effective radiated power from the antenna of 61.8 dBW. These signals have both a frequency deviation and necessary bandwidth of 69 MHz. Signals received by each space station from the White Sands complex utilize frequency bands from 14598.7 MHz to 14651.2 Mhz and from 15173.7 MHz to 15226.2 MHz. The mean maximum effective radiated power from each antenna is approximately 40 dBW, and each antenna receives signals having both a frequency deviation and necessary bandwidth of 2.4 MHz.

For all signals sent or received through the space stations on the TDRSS satellites, the maximum RF output power at the transmitter terminals is 500W. The emission characteristics of all signals would be designated G7D pursuant to Section 2.201 of the FCC's Rules, 47 C.F.R. § 2.201.

III - DESCRIPTION OF THE SERVICE

SDI has developed the SeismicStar Communications System ("SeismicStar") as a means to enable the marine seismic industry to move into the 21st century of data

transmission. This industry provides exploration and data processing services for the oil and gas industry. SDI estimates that approximately 157 exploration vessels survey the ocean floor to identify potential deposits of oil and gas. The vessels take soundings of surveyed areas and record those soundings via standard digital data recording techniques. At present, gathered information is stored on tapes that are typically transported to data processing centers by ship, a process that normally takes six weeks but can take several months.

SDI proposes to install transmitting equipment on these ocean-going vessels, and then to transmit the data generated to NASA's complex in White Sands, New Mexico and from there by landline to data processing centers, which will initially be located in Houston, Texas. SDI has entered into a contractual relationship with NASA through NASA's representative, Lockheed Martin (the "Consolidated Space Operations Contract" or "CSOC"), to utilize excess capacity on TDRSS and the associated government frequencies on a per-minute basis. Under the terms of CSOC, NASA continues to own, operate, and control TDRSS and the earth station in White Sands, and to have complete control over the timing of transmissions from the vessels to the White Sands facility. (As discussed in Section V below, however, SDI will be fully responsible to the Commission for operation of the TDRSS space stations at any time when SDI is using any of them.)

Using TDRSS, SeismicStar will provide high-volume data transmission from seismic exploration vessels to processing centers, initially at speeds of up to 311 Mb/s. If the service proves commercially viable, SDI will derive revenue from the use of the TDRSS fleet for the services, and will pay for the use of TDRSS on a per-minute basis.

To provide the service, SDI will install a transmitting terminal on board a vessel, consisting of data modem equipment, a command-link demodulator, and a data and communications server system. An above-deck system will consist of a Radome-enclosed 2.4 meter antenna, a high-power amplifier, a low-noise amplifier, frequency converters, and monitor and control equipment. The terminal is an unmanned system with autonomous operating programs. To comply with the CSOC, which requires that NASA retain control of the timing of data transmission and the ability to preempt SeismicStar transmissions at any time and for any reason, the terminal is programmed not to transmit if a TDRSS satellite is not available. Transmissions from the ship-based terminal will be turned off and on by signals sent by NASA via the White Sands facility.

SDI maintains a control center for SeismicStar operations at Las Cruces, N.M.

- This control center monitors all monitor and control data ("M&C") contained in the data streams coming from the vessels. In addition, the SDI control center will obtain M&C data from the SeismicStar terminals via dial-up lines or, in some cases, via the Internet.

SDI seeks to use TDRSS to provide SeismicStar because available commercial satellite systems do not have the technical capabilities, geographic coverage, or capacity necessary to transmit the data generated by these vessels. As further described in Exhibit 2, only TDRSS provides adequate link margin, geographic coverage, and transmission capacity to relay vast quantities of data, accurately and quickly, from anywhere in the ocean.

IV - PUBLIC INTEREST CONSIDERATIONS

The Commission's grant of SDI's application will serve the U.S. public interest by permitting the development of high-speed, high-volume transmission of data needed

by the oil and gas industry to map future exploration. In addition, SDI's use of TDRSS fulfills Congressional and Executive Branch goals of commercializing government-owned space assets.

The long-term future of the oil and gas industry depends on reliable seismic data to determine new drilling strategies. The current system of seismic mapping and transportation of the information by ship delays data evaluation for a period that can range from several weeks to several months. This delay results in significant cost to the oil and gas companies in terms of the time value of money. SDI believes that the oil and gas industries can save up to \$4.1 million on a single survey using the SeismicStar service to get the data to a processing center sooner; these savings, of course, ultimately benefit U.S. consumers.

Congress and the Administration have taken a number of steps to promote commercialization of space assets owned by NASA and other government agencies. The Commercial Space Competitiveness Act of 1992, 15 U.S.C. §§ 5801-5807, authorizes U.S. agencies, including NASA, to make their unique facilities available to private entities on a non-interference basis. The Act allows private entities to use their space-related facilities on a reimbursable basis to support commercial activities when equivalent commercial services are not available. (As shown in Exhibit 2, no commercial services are available at this time.) In connection with NASA's fiscal year 2000 appropriations, Congress required NASA to submit a report on how it plans to fully commercialize some of its functions.¹

¹ See S. Rep. No. 106-161, at 110 (1999).

SDI's use of TDRSS fulfills another objective of providing funding to NASA's programs. Under CSOC, SDI pays for antenna use on a per-minute basis, for up to 3,000 minutes per day. There is a potential, if SeismicStar turns out to be commercially viable, for NASA to receive the benefit of up to \$35 million a year.

NASA has concluded that SDI's proposal offers a unique opportunity to promote a new commercial satellite communications initiative without interfering with primary government use of the reserved government spectrum.² NASA believes that SeismicStar has the potential to stimulate development of commercial alternatives to TDRSS that will offer the opportunity for the U.S. Government to satisfy its satellite communications infrastructure needs from private commercial sources.³ NASA recently reiterated its support for SeismicStar.⁴

In sum, the instant application affords the Commission the opportunity to bring the modern world of high-speed data transmission to seismic exploration vessels, thus promoting more efficient oil and gas exploration, fulfilling Congressional and Executive Branch objectives of furthering commercial use of existing space assets, and benefiting the U.S. public by funding NASA activities and facilitating oil and gas exploration.

V - CONDITIONS OF USE

Space Data acknowledges the unique nature of the license it seeks and will agree to operate in accordance with the following restrictions, should the Commission consider

² Letter from Robert E. Spearing, Deputy Associate Administrator for Space Communications, Office of Space Flight, NASA, dated December 23, 1999 to William T. Hatch, Chairman, Interdepartment Radio Advisory Committee, Department of Commerce, at 15.

³ *Id.*

⁴ See Letter of Joseph H. Rothenberg, Associate Administrator for Space Flight, NASA, dated July 20, 2000, to Frank Van Rensselaer, Chief Executive Office, SDI (attached as Exhibit 3).

them necessary. In general, SDI agrees that it shall be responsible for complying with all FCC rules and regulations during all times when SDI operates TDRSS. More specifically, SDI agrees to the following:

1. SDI will not have an exclusive or first-priority right to operate TDRSS; rather, SDI will operate TDRSS only on a time-share basis and subject to the rights of other authorized government users. No operation by SDI of TDRSS may interfere with any authorized government use of TDRSS, and any SDI operation of TDRSS may be preempted at any time for other authorized, higher-priority government uses.
2. SDI agrees that the FCC may prohibit vessels from transmitting data via TDRSS while such vessels are within a certain distance of any country and agrees to comply with any additional use restrictions that the FCC may communicate to SDI from time to time.
3. SDI agrees to maintain a log recording (i) all times when SeismicStar transmits data via TDRSS, (ii) the location of each vessel during such transmission, (iii) the frequency band utilized, and (iv) the data rate. SDI agrees to file all such logs with the FCC semi-annually and acknowledges that the FCC will make such logs available to the general public.
4. SDI understands that the operational license requested hereby will be effective only as long as, and until, such time as any commercial satellite operator is able to demonstrate, to the Commission's satisfaction (after opportunity for comment by SDI), that such commercial operator is able to provide an alternative to TDRSS that meets SDI's needs.

5. SDI agrees to comply with the Consolidated Space Operations Contract.
6. SDI agrees that the operational license requested hereby will expire upon the earlier of (i) ten years from the date on which it is granted, (ii) any termination of CSOC, or (iii) such time as a commercial alternative is available pursuant to item 4 above.

VI - LEGAL QUALIFICATIONS

SDI is legally qualified to hold the requested authorizations for SeismicStar. A FCC Form 430, containing all of the information required to demonstrate SDI's legal qualifications is attached hereto as Exhibit 4.

VII - FINANCIAL QUALIFICATIONS

Although the FCC generally requires that satellite applicants establish their financial qualifications as a condition to licensing, such a requirement should not be applicable in this case. The FCC first adopted rules relating to the financial qualifications of satellite applicants in the context of traditional Fixed Satellite Service systems operating from geostationary orbits.⁵ In those circumstances, the FCC reasonably concluded that a scarce resource – the orbital slot – had to be protected. More recently, the FCC has developed financial qualifications standards for certain non-geostationary

⁵ See 47 C.F.R. § 140(b)-(e). Under these rules, an applicant must demonstrate its current financial ability to meet the estimated costs of construction, launch, and other expenses for the proposed system, as well as the operating expenses for one year after launch. Id. § 140(c). As noted above, this standard was adopted in the first instance for domestic GSO systems. A slightly relaxed standard was imposed on international separate system GSO licenses, which required applicants to demonstrate only their "preparedness to assume the costs and liabilities involved in constructing, launching and operating the system for one year." Establishment of Satellite Systems Providing International Communications, 101 F.C.C.2d 1046, 1164 (1985).

orbit systems – including both "Big LEO"⁶ and "Little LEO"⁷ Mobile Satellite Service systems – which involve an exclusive spectrum assignment for each licensee.

SDI fits neither of these categories. It seeks neither an orbital slot nor an exclusive frequency assignment that could be "warehoused."⁸ The satellites in question have been constructed and are in orbit. NASA is responsible for all operational costs; SDI is obligated under the CSOC contract only to pay a per-minute fee for transmission. There is no plausible scenario under which SDI could warehouse orbital slots or spectrum.

The FCC has acknowledged that the imposition of financial qualifications standards in situations where there is no reasonable likelihood that scarce spectrum resources could be wasted or warehoused is an unnecessary regulatory burden.⁹ Neither the letter nor the underlying policy of any of the various satellite financial qualifications standards rationally applies to SDI.

Should the Commission determine to apply financial qualification rules, obviously SDI need not show its financial ability to construct and launch the satellites. SDI will have the financial ability to meet operating expenses, which will consist primarily of payments to NASA for data transmission via TDRSS on a per-minute basis,

⁶ 47 C.F.R. § 25.143(b)(3). Each Big LEO applicant is required to demonstrate that it is "financially qualified to meet the estimated costs of the construction and launch of all proposed space stations in the system and the estimated operating expenses for one year after the launch of the initial space station." *Id.*

⁷ 47 C.F.R. § 25.142(a)(4). Each Little LEO applicant is required to demonstrate that it is "financially qualified to proceed expeditiously with the construction, launch and operation for one year of the first two space stations of its proposed system immediately upon grant of the requested authorization." *Id.*

⁸ Additionally, by definition, SDI is not subject to either the Big LEO or Little LEO standards, because it is not seeking to provide mobile services.

⁹ Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-1400 MHz Frequency Bands, 9 F.C.C.Rcd. 1094, 1108 (1994).

for one year after commencement of service. Since SDI will incur this expense only when it has customers willing to pay for transmission, SDI will have the necessary cash flow to meet its expenses.

VIII - TECHNICAL QUALIFICATIONS

SeismicStar will comply with the technical requirements of Part 25 of the FCC's rules. In particular, SeismicStar satisfies the intent of Section 25.210 by making maximum use of bandwidth.

IX - WAIVER PURSUANT TO SECTION 304 OF THE ACT

In accordance with Section 304 of the Communications Act of 1934, as amended, 47 U.S.C. § 304, SDI hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

X. - REQUEST FOR WAIVER OF SECTION 2.106 OF THE RULES

According to the Table of Frequency Allocations, contained in Section 2.106 of the FCC's Rules, 47 C.F.R. § 2.106, the frequencies allocated to the TDRSS space stations are specifically authorized for government use. Because SDI's license application does not conform to the Table of Frequency Allocations, SDI hereby requests a waiver of Section 2.106 to the limited extent set forth herein. SDI is not requesting that the FCC adopt any revisions to the Table of Allocations.

For the reasons discussed in Section IV, the public interest would be served if the FCC grants the requested waiver. In the absence of commercial alternatives, TDRSS provides the only avenue for SDI to relay quickly vast quantities of data from ocean-

going vessels around the world. Operation by SDI will provide the oil and gas industries with high-speed, high-volume transmission of seismic data, resulting in savings to the oil and gas industry and ultimately to the U.S. consumer. In addition, SDI's use of TDRSS fulfills Congressional and Executive Branch goals of commercializing government-owned space assets and promoting efficient spectrum utilization.

XI - CONCLUSION

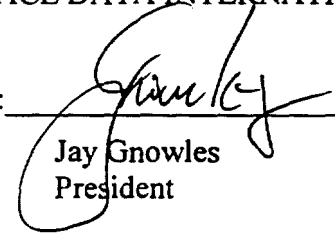
For the reasons set forth above, SDI requests that the Commission promptly grant this application and authorize SDI to operate NASA's Tracking and Data Relay Satellite System and to utilize the associated government frequencies.

The undersigned certifies individually and for SDI that all of the statements made in this application are true, complete and accurate to the best of his information, knowledge and belief, and are made in good faith.

Respectfully submitted,

SPACE DATA INTERNATIONAL LLC

By: _____


Jay Gnowles
President

Exhibits

Exhibit 1	List of Members, Managers and Officers
Exhibit 2	Absence of Commercial Alternatives
Exhibit 3	Letter from Joseph H. Rothenberg
Exhibit 4	Form 430

Counsel:
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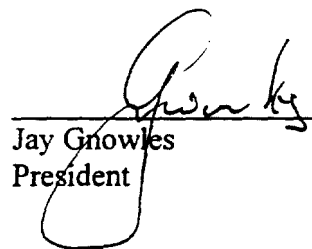
August 4, 2000

ANTI-DRUG ABUSE ACT CERTIFICATION

Pursuant to Section 1.2002 of the Commission's rules, 47 C.F.R. § 1.2002, SpaceData International LLC certifies that neither the applicant nor any of its shareholders, nor any of its officers or directors, nor any party to this application is subject to a denial of Federal benefits pursuant to authority granted in Section 5301 of the Anti-Drug Abuse Act of 1988, 21. U.S.C. § 862.

SPACEDATA INTERNATIONAL LLC

By:


Jay Gnowles
President

Dated: August 4, 2000

EXHIBIT 2

ABSENCE OF COMMERCIAL ALTERNATIVES

For technical reasons, SDI has sought to use TDRSS, rather than commercial satellite systems, to provide a data transmission service to ocean-going oil exploration vessels. Available commercial satellites, operated primarily by Inmarsat, INTELSAT and PanAmSat, do not have the technical capabilities, geographic coverage or capacity necessary to transmit the data generated by these vessels. Only TDRSS provides adequate link margin, geographic coverage and transmission capacity. While per minute use of commercial satellites is significantly cheaper than TDRSS, technically TDRSS is the only system capable of transmitting vast quantities of data, accurately and quickly, from anywhere in the ocean.

Technical Capabilities

SDI must transmit vast quantities of data using the limited physical space and power generally available on-board ships. These requirements severely constrain the parameters of satellites that can be used. Only TDRSS meets all of the necessary requirements.

In gathering seismic data from the ocean floor, vessels normally produce a minimum of 150 gigabytes (1200 gigabits) of information a day. Newer vessels are capable of producing 800 gigabytes (6400 gigabits) of information a day. In addition, communications protocols add 15% to the data stream, so that the minimum daily data flow per vessel is 172.5 gigabytes (1380 gigabits) and the maximum is 920 gigabytes (7360 gigabits).

At the same time, space for transmitting equipment is limited on these vessels. The smaller antenna sizes that must be used on-board ships limit the antenna gain that can be achieved. Moreover, the amount of power that can be generated to operate the transmitting equipment is constrained due to limitations on the size and power handling capability of the antenna platform slip-ring. In general, the maximum antenna size is 2.4 meters,¹⁰ while the maximum transmitter power is approximately 500 watts. Together, these limitations bound the power (and hence data) that can be directed at the satellite receive antenna. Very high performance satellite receive antennas are therefore required to receive large amounts of data.

Given the large amount of data to be transmitted, and the limited size and power of the physical plant, the satellite receiving antenna must have a gain to system noise temperature ratio ("G/T") of at least +7 dBi/K.¹¹ As shown in Schedule 1 (Link Budget

¹⁰ Some ships cannot accommodate even a 2.4 meter antenna, which already poses a constraint on provision of SDI services.

¹¹ If the on-board antenna diameter could be larger, the limited power available on-board ship could be transmitted to the satellite at a higher gain, thus reducing the G/T requirement of the satellite. If the antenna platform slip-ring could be larger, a proportionally larger power amplifier could be used to successfully transmit to satellite antennas with a lower G/T. However, ship-board operation precludes such measures.

Calculations), this figure stems from a requirement to have the ratio of energy-per-bit over the amount of noise generated ("Eb/No") equal or greater to 8.4 dB,¹² because that is the threshold capability of the state-of-the-art modem at the receiving end of the transmission in White Sands. (The situation would be worse using a commercial earth station antenna and modem, requiring an even higher G/T to compensate.) Any transmission below 8.4 dB would not be reliable. Errors in data transmission would occur if, for example, the antenna mispoints.

Very few commercial satellites have a G/T of +7 dBi/K; in fact, most operate at a negative G/T.¹³ TDRSS, on the other hand, has a G/T of 24.4, thus, assuring SDI of an adequate link margin and error-free data transmissions.

Geographic Coverage

The vessels that SDI will serve may be located anywhere in the ocean. Obviously, the vessels are not generally located near population centers, which are the focus of commercial geostationary orbit satellites.¹⁴ Only Inmarsat, which, as discussed below, lacks the transmission capacity that SDI requires, provides coverage of the ocean areas where the vessels will be operating. The footprints of other commercial satellites often "spill-over" from land into neighboring ocean regions; most such ocean coverage would be edge-of-footprint, however, and therefore would provide a lower carrier-to-noise ratio ("C/N"). Moreover, piecing together total ocean coverage with redirected commercial beams would be impossible. It would require contracting for far more capacity than actually needed, to keep a satellite or beam positioned over a spot in the ocean and available when needed,¹⁵ and there would inevitably be large gaps in the coverage of the network. In addition, success at such an attempt would require that the technical

¹² The link calculations presented in Schedule 1(a) include 3 dB of margin to assure the link will not be broken when subjected to minor variations in weather. Therefore, the target Eb/No is specified in Schedule 1(a) as $8.4 + 3 = 11.4$ dB. As shown, a G/T of +7 dBi is necessary to approach this target. In fact, at least 10-15 dB of margin is probably required to protect against expected causes of signal fading and interference in the SDI environment. For example, the link must withstand the movement of the boat, including rolling and pitching, and inclement weather conditions, including sea spray. Commercial links could not provide the necessary margins.

The link calculations presented in Schedule 1(b) illustrate the impact of a 1 dB decrease in the satellite antenna G/T. As shown, this results in a 0.6 dB decrease in the Eb/No, which causes an increase in the data error rate of more than one order of magnitude. With an Eb/No decrease of 1 dB, the data error rate would increase by three orders of magnitude. Such signal power decreases also can result from minor antenna mispoints, such as caused by ship movement. These calculations illustrate the very tight constraints under which SDI must operate. SDI customers need absolute data integrity, requiring BER greater than 1×10^{-10} .

¹³ Moreover, as discussed below, with a commercial satellite, SDI would never be operating at the center of the beam. At the beam edges, the G/T would be even lower.

¹⁴ While non-geostationary orbit constellations could more easily provide service to the ocean regions, no such systems have been implemented that could handle the large data rates needed for the SDI service.

¹⁵ Commercial providers can sometimes redirect a beam or a satellite to serve a specific ocean region. However, these measures are not usually performed for occasional or temporary uses, such as transmission to a ship in the ocean. Satellite movement and beam switching risks damage to the satellite, and is generally performed only for long-term 24 hour/day operations.

requirements discussed above be met for each and every commercial beam used. This is technically impracticable.

In contrast, TDRSS beams are specifically designed to move ± 32 to the north and south and ± 22 to the east or west. NASA can reposition spot beams in less than a minute and a half so that SDI can transmit and receive from a number of vessels over a wide geographic region.

Transmission Capacity

The transponders on Inmarsat, if utilized with 100 percent efficiency, can transmit up to 16.68 gigabytes of data daily at a data rate of 1.544 Mb/s. Given that SDI expects the minimum daily data flow per vessel to be 172.5 gigabytes (1380 gigabits), Inmarsat, even when operating at perfect efficiency, falls far short of providing the necessary level of transmission capacity needed to service even the minimum daily data flow of one vessel.

The transponders on INTELSAT and PanAmSat satellites have a capacity of 72 MHz, which allows for a maximum data rate of 155 Mb/s.¹⁶ As shown on Schedule 2 (Data Transmission Times), transmitting 150 gigabytes, the minimum amount of data produced by a vessel per day, plus the communications overhead, would take about 2.5 hours on a 72 MHz transponder. Even if these transponders served the ocean regions of interest to SDI (which they do not), transmitting the 800 gigabytes of data produced by the newer vessels would require about 13 hours. This would limit to two the number of vessels that could be served by each transponder per day, severely impacting the viability of the SDI service.¹⁷

In contrast, TDRSS transponder capacity is 225 MHz, with current data rates of up to 311 Mb/s -- twice the rate of the INTELSAT and PanAmSat satellites. Moreover, it may also be possible in the near future to use TDRSS's 225 MHz transponders to transmit data at 622 Mb/s -- four times greater than commercial data rates.

Economic Analysis

Schedule 3 (Cost Comparison) compares the transponder cost using TDRSS to that obtained with commercial satellites, assuming commercial systems existed that met SDI's requirements. NASA intends to charge per antenna minute, while transponders on commercial satellites are rented on a yearly basis. In order to provide a rough comparison, SDI has calculated the cost of transponder capacity on an hourly basis (the yearly amount divided by the number of hours in a year) at a range of prices.¹⁸ Because, at a minimum, TDRSS transmits twice as much data an hour as commercial satellites, the TDRSS transmission time is half that of commercial satellites.

¹⁶ INTELSAT also operates a few 110 MHz transponders to transmit special events, such as the Olympics, disasters, political events, all of which occur on land. However, these still provide a data rate of only 155 Mb/s.

¹⁷ In addition, the longer the required transmission time, the greater the chance of a link breaking due to ship movement or inclement weather.

¹⁸ The commercial costs are based on full-time, and not "occasional use," transponder lease rates, because SDI would have to lease them on a full-time basis to ensure their availability when needed.

Assuming a commercial transponder rents for \$3 million a year, at the minimum data flow of 150 gigabytes per day (plus 15% for overhead), transmission over that commercial transponder would cost \$281.38 (for about 2.5 hours of use), while TDRSS would cost \$2,366.26 (for about 1.2 hours of use). At the maximum daily data rate of 800 gigabytes (plus 15% for overhead), the commercial transponder would cost \$1,500.67 (13.1 hours), while TDRSS would cost \$12,620.03 (6.6 hours).¹⁹

These calculations show that use of commercial satellites would be far preferable for SDI from an economic standpoint, if the technical, coverage, and capacity barriers of commercial satellites could be overcome. However, for the reasons given above, they cannot be overcome at any time in the near future, and therefore, SDI seeks to use the available capacity of the TDRSS system. Although, per minute, it is significantly more expensive than commercial capacity, the TDRSS system is the only satellite system able to meet the requirements of the SDI service.

¹⁹ The price of using commercial satellites does not reach the level of the TDRSS cost until one considers commercial transponders leasing for at least \$8 million a year. The current rates in the U.S. domestic market are more on the order of \$1.6 million annually.

EXHIBIT 3**Letter from Joseph H. Rothenberg**

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



JUL 20 2000

Reply to Attn of

M-3

Mr. Frank Van Rensselaer
Chief Executive Officer
SpaceData International LLC
7625 SW 161st Terrace
Miami, FL 33157


Dear Mr. Van Rensselaer:

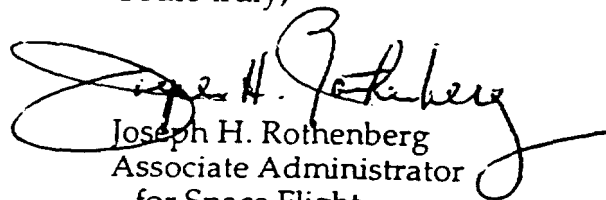
This is in response to your letter of June 10, 2000, in which you request the NASA Administrator send a letter to SpaceData International (SDI) supporting your company and its SeismicStar program.

As you know, NASA has been receptive to SDI's proposal to use capacity of NASA's Tracking and Data Relay Satellite Service (TDRSS) on an as available basis to transmit geologic and seismic data from ships at sea to SDI's Texas base for subsequent commercial purposes. We believe this proposal supports nicely NASA's initiatives to broaden commercial uses of space and space-related technology. Pursuant to direction from the Administration and the Congress, NASA has been actively engaged in furthering the commercialization of several of its activities. SDI's proposed use of the TDRSS offers the real possibility of a significant commercialization success story.

As you are also aware, NASA has supported SDI's proposal in several interactions with interested government entities, principally the National Telecommunications and Information Administration (NTIA). Use of the government spectrum and TDRSS as proposed by SDI requires authorization by NTIA. That agency has stated that current law precludes it from giving such approval. It is my understanding that your company is now pursuing a modification to the law to enable your project to go forward.

NASA continues to be a strong supporter of the SDI SeismicStar initiative. All the necessary contract mechanisms through our CSOC contract are ready to be engaged and we stand ready to provide available capacity from our TDRSS when the current statutory impasse is resolved.

Yours truly,


Joseph H. Rothenberg
Associate Administrator
for Space Flight

Appendix 2

STATEMENT OF WIL ZARECOR CHIEF TECHNOLOGY OFFICER

SPACE DATA INTERNATIONAL LLC

Space Data International LLC ("SDI") intends to provide high-speed, high-volume transmission of data gathered by seismic exploration vessels in the oceans to data processing centers in the United States through NASA Tracking and Data Relay Satellite System ("TDRSS"). This service, called SeismicStar, has never been provided before. SDI has tested its planned service from land-based transmitters through TDRSS. But it has never tested the service from vessels on the oceans. We therefore do not know if the service SDI will offer is technically feasible. We need a period of time to experiment under actual sea conditions. Our program of exploration is described below.

A number of variables make it difficult to serve ocean-going seismic vessels effectively. First, SeismicStar must take into account the vast quantities of data to be transmitted. Vessels normally produce a minimum of 150 Gigabytes (1200 gigabits) of information a day. Newer vessels are capable of producing 800 Gigabytes (6400 gigabits) of information a day. In addition, current communications protocols add 15% to the data stream, so that, in most instances, the minimum data flow is 172.5 gigabytes (1380 gigabits), and the maximum is 920 gigabytes (7360 gigabits).

Second, space for transmitting equipment tends to be limited on seismic exploration vessels. Consequently, the antennas cannot be very large, and the amount of power that can be generated to operate the transmitting equipment is constrained.

Third, seismic data needs to be handled very carefully to ensure that it is not corrupted in any way during transmission, a task made more difficult by the problems in compressing seismic data. Seismic data is totally random, 32 bit floating point digital data. Compression algorithms operate on the repetition between numbers, and such repetition is often absent from seismic data. In addition, the format in which data is collected varies from company to company and from system to system, so modifications must be made to suit many vessels. SDI has been testing software that can address compression problems as well as the need for seamless transmission, but SDI expects that it will take several months of transmission from ship to the data processing centers to verify that the software works efficiently under all operating conditions.

Finally, as more fully described in the SDI's application to operate the TDRSS, filed today with the Commission, the transmitter must be an unmanned system with autonomous operating programs. NASA will retain control of the timing of data transmission and the right to preempt SeismicStar transmissions at any time and for any reason.

SDI will test the NASA transmitter control mechanism and the satellite tracking software it has developed for SeismicStar. TDRSS satellites do not have beacons that would allow the SeismicStar terminals to track the satellites when the terminals are not scheduled to transmit. Instead, the terminals, which are on ships that are constantly moving in various directions, must track the satellites operating in various inclined orbits. This experiment will test the viability of software in each of four directions (Northeast, Northwest, Southeast, Southwest) from a subsatellite point to verify that the terminal will "see" a satellite carrier radiated from the White Sands complex and automatically turn itself on once the terminal determines that the satellite carrier is addressed to it. Finally, in this first stage, SDI will verify that the Monitor and Control ("M&C") data contained in the data streams coming from the vessels are operable.

Additional experiments will allow SDI to verify that the SeismicStar terminals can operate at sea in all types of weather and ocean conditions. Terminal power levels and other operating parameters will vary depending on those conditions. In order to determine the optimal parameters, SDI needs to create a table of ocean/weather conditions versus performance of E_b/N_0 , C/N, Ship terminal EIRP, etc. SDI also needs to refine the procedures for generating satellite antenna pointing vectors and scheduling data transmission with NASA. These experiments will be done in two phases as part of a six month demonstration program:

(i) Sea Trial: During the initial phase, occupying the first month of the demonstration program, SDI will verify that all basic systems are operational. During this time, SDI will correct and enhance operational programs and procedures while verifying that the planned operational modes actually work as intended. This phase will give SDI basic information regarding tracking of the satellite and other operational parameters. It will also enable SDI to confirm that the data, which is transmitted via satellite from the ship to the White Sands facility at 311 Mb/s can be seamlessly forwarded by landline to the data processing centers at lower terrestrial data rates.

(ii) Operational Trial: This phase, occupying the last five months of the demonstration program, will verify that SeismicStar can operate under varying weather and ocean conditions and with varying data loads. It will also verify operation via different TDRSS satellites and from different ocean locations. SDI will conduct the operational trial with more than one vessel if possible. This will allow SDI to test multiple addressing schemes and handling of data from more than one source to ensure that

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770 5918813
Wil Zarecor

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data from different ships will not be mixed when delivered to the customer. If this test does not prove successful, SDI may not be able to transmit data simultaneously to multiple sources and multiple customers.

I certify that the foregoing information is true and correct.



Wil Zarecor

August 4, 2000

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*NOT AN ACTIVE MEMBER OF THE DC BAR.
**ADMITTED IN FRANCE ONLY.

August 4, 2000

Mr. Andrew Fishel
Managing Director
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Waiver of the Filing Fee for an Application to Operate
In-Orbit Satellites and Deferral of the Filing Fee

Dear Mr. Fishel:

Pursuant to Sections 1.3 and 1.1117 of the Commission's Rules, 47 CFR §§ 1.3, 1.1117, SpaceData International LLC ("SDI") hereby requests: (i) a waiver of the required application fee and (ii) a deferral of the application fee until such time as the Commission rules on SDI's request for a waiver.

I. Introduction

SDI is today filing an application (the "SDI Application") for a license, under Sections 301 and 303(c) of the Communications Act, 47 U.S.C. §§ 301, 303(c), to operate on a time-share basis five identical radio stations, comprising the Tracking and Data Relay Satellite System ("TDRSS"), operated by the National Aeronautics and Space Administration ("NASA"), and to utilize the associated radio frequencies. These five geostationary satellites were launched by NASA and are currently operational. As is explained in detail in the SDI Application, SDI has a contract with NASA (via NASA's contractor) to use TDRSS on a preemptible basis to transmit data from ocean-going

seismic exploration vessels through NASA's control center in White Sands, New Mexico, to data processing centers in the United States.

The Commission imposes a fee of \$89,460.00 for each space station covered by an application for authority to launch and operate a geostationary space station.^{1/} Unless the Commission reduces the filing fee, SDI will be required to pay \$447,300, an absurd requirement for processing a single application to use satellites that are presently in orbit and have been fully coordinated. As described below, SDI does not have the resources to pay \$447,300 and thus is requesting a waiver of the filing fee, as well as a deferral of the fee until such time as the Commission rules on SDI's request for a waiver.

II. The Commission should waive the license application fee required by Section 1.1107 of the Commission's Rules.

A. Financial Hardship

The purpose of the Commission's fee program is to enable the Commission "to assess and collect charges for certain of the regulatory services it provides to the public. The charges are based primarily on the Commission's costs of providing these regulatory services."^{2/} The Commission has stated that it will grant a waiver, where "a petitioner presents a compelling case of financial hardship" and submits documentation that demonstrates that the fee payments impose an undue burden.^{3/} In making its determination, the Commission examines information such as "a balance sheet and profit and loss statement (audited, if available), a cash flow projection for the next twelve months (with an explanation of how calculated), a list of [the applicant's] officers

^{1/} Schedule of Charges for Applications and Other Filings in the International Services, 47 CFR § 1.1107.

^{2/} See Establishment of a Fee collection Program to Implement the Provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, 2 FCC Rcd. 947, 948 (1987). Congress intended that the filing fee for a given application reasonably approximate the cost of the Commission's services in processing that application. *See* H.R. Rep. No. 247, 101st Cong., 1st Sess. 545 (1989); H.R. Rep. No. 300, 99th Cong., 2nd Sess. 506 (1985).

^{3/} See Letter to Jane Goode Breder from Mark Reger, Chief Financial Officer, dated July 15, 1999 ("Breder Letter") (comparing Implementation of Section 9 of the Communications Act, 9 FCC Rcd. 5333, 5346 (1994), reconsideration granted, 10 FCC Rcd. 12759 (1995)).

and [the applicant's] highest paid employees, other than officers, and the amount of their compensation, or similar information."^{4/}

SDI does not have the resources to pay a filing fee of \$477,300. As shown in the attached declaration of Jay Gnowles, President of SDI, SDI is a start-up company with only two sources of revenue -- cash from investors and cash from potential customers. As stated by Mr. Gnowles, it has been over a year since SDI began to seek authority to provide service.^{5/} The lengthy delays in that process have made it impossible to obtain additional investor financing.^{6/} No potential investor will invest until SDI has received a license from the Commission, and the one potential customer has delayed payment of \$100,000 owed to SDI until it has received a license.^{7/} Mr. Gnowles' declaration describes SDI's cash flow and its expenses over the past year and notes that the situation is so dire that SDI has stopped paying salaries to its four employees.^{8/} Supporting documentation attached to Mr. Gnowles' declaration shows clearly the absolute inability of SDI to pay \$477,300.

The public interest would be served by grant of the waiver. SDI proposes to provide a service that is not currently available and that will greatly improve oil and gas exploration, thus benefitting U.S. consumers. In addition, once operations commence, SDI will pay a significant portion of its revenue for TDRSS, enabling NASA to carry out other projects that will benefit the public. Finally, providing the service will fulfill a Congressional and Executive Branch goal of commercializing space assets.

B. Minimal Commission Resources

An additional reason to waive the application fee in this case arises from the minimal Commission resources required to process the application. In the case of geostationary satellites, this standard application fee is based upon the requirement that the Commission review the legal, technical, and financial characteristics of the applicant; review the technical aspects of the proposed satellite system; process the filings required by the International Telecommunication Union ("ITU"); and coordinate the satellites and associated frequencies with the ITU. This process is normally extremely complicated and time-consuming, requiring the attention of Commission engineers, lawyers and policy

^{4/} Id. at 12761-12762.

^{5/} Declaration of Jay Gnowles, dated August 4, 2000.

^{6/} Id.

^{7/} Id.

^{8/} Id.

makers. Often it requires the Commission to sort through competing filings, conduct hearings, and attend numerous international meetings.

Obviously, the Commission will have to do none of these things with respect to the SDI Application. The relevant satellites have been operational for years; the technical aspects of the satellites are well-known and SDI's use of TDRSS will not result in any changes to the operation of TDRSS or the frequencies it uses. The Commission will not need to review the technical aspects of the proposed satellite system or the technical and financial characteristics of the applicant, because the satellites are in orbit. There are no ITU filings required, and no relevant international meetings to attend. This request for a waiver fits squarely within the Commission's policy of reducing application fees "where good cause is shown and where waiver or deferral of the fee would promote the public interest."^{9/}

While there have not been any identical requests, there have been analogous situations where the Commission has agreed to waive a portion of the application fee. For example, the Commission granted a partial waiver of the application fee to Hughes Communications, Inc. on the grounds that processing and coordinating technically identical geostationary satellites occupying the same orbital location would require the Commission to expend fewer resources on ITU advance publication, coordination and notification than if the satellites were technically dissimilar.^{10/} Similarly, in response to a request from TelQuest Satellite Services, LLC, the Commission waived more than 99% of the application fee for identical receive-only earth stations. In that case, the Commission found that the scheduled fee "would bear scant, if any, relation to the Commission's cost of processing TelQuest's application."^{11/} Finally, the Commission granted a similar request for a filing fee for multiple earth stations to Grupo Televisa, S.A. ("Televisa"), noting that "the requested waiver will minimize the regulatory burdens on Televisa, expedite processing Televisa's application and, more

^{9/} 47 CFR § 1.1117(a).

^{10/} See Letter to John P. Janka, Esq. and Arthur S. Landerholm, Esq. from Mark Reger, Chief Financial Officer, Federal Communications Commission, dated October 20, 1998 (citing Public Notice dated August 26, 1997, Filing Fee Waiver Established for Applications Proposing Geosynchronous Space Stations in Response to Report Nos SPB-88 and SPB-89 Cut-Offs Established in the 2 GHz and 36-51.4 Frequency Bands).

^{11/} See Letter to James U. Troup, Esq. and Brian D. Robinson, Esq. from Mark Reger, Chief Financial Officer, Federal Communications Commission, dated July 6, 1999.

importantly, enable the prompt initiation of service by Televisa, during the pendency of the Commission's review of the underlying fee issue.^{12/}

The Commission has in the past granted a reduction in regulatory fees related to use of TDRSS.^{13/} In that case, Columbia Communications Corporation ("Columbia") had a license to use C-band transponders on two TDRSS satellites, and the Commission based its decision on the facts that Columbia's use of the satellites was secondary to NASA and preemptible at any time, and that Columbia paid a significant portion of its revenue to NASA. These factors are also present in this case.

There is another reason why the Commission should approve a waiver of the application fee. In normal circumstances, SDI would be applying for a fixed transmit/receive earth station license to transmit data through TDRSS, for which the application fee is \$1,950 for the initial earth station application.^{14/} The earth stations that will operate with SDI's service, however, are on vessels in international waters and hence not subject to Commission jurisdiction. Under these circumstances, SDI had no choice but to seek a license to operate TDRSS. Plainly, SDI should not be penalized for its lack of U.S. earth stations, and the situation is not one envisioned when the FCC's schedule of application fees was adopted.

III. The Commission should grant a deferral of the application fee.

In most cases the Commission requires submission of the full application fee with a request for waiver in order to expedite the filing process and discourage speculative fee waiver requests.^{15/} However, the rules provide for deferral of this application fee "where good cause is shown and where waiver or deferral of the fee would promote the public interest."^{16/} As in the case of a waiver request, a petitioner may fulfill this requirement by presenting a compelling case of financial hardship and

^{12/} See, Letter to Norman P. Leventhal, Esq. and David S. Keir, Esq., from Marilyn McDermott, Associate Managing Director for Operations, Federal Communications Commission, dated February 26, 1997.

^{13/} Application of Colombia Communications Corporation, Memorandum Opinion and Order, FCC 98-299 (rel. January 22, 1999).

^{14/} See 47 CFR § 1.1107.

^{15/} 47 CFR § 1.1117; In re: Establishment of a Fee Collection Program to Implement the Provisions of the Omnibus Budget Reconciliation Act of 1989, 5 FCC Rcd. 3558 ¶ 32 (April 20, 1990).

^{16/} 47 CFR § 1.1117(a).

submitting documentation demonstrating that the fee payments impose an undue burden.^{17/} As described in detail above, SDI does not have the resources to pay the filing fee at this time. Mr. Gnowles' declaration points out, however, that there will be revenues in a relatively short time after a license is granted and operations can commence.^{18/}


Deferral of the fee in this case -- until the Commission determines whether to waive the fee -- is in the public interest and consistent with past Commission practice. Deferral is the only way for SDI to obtain the license that is essential to its continued existence and to the generation of cash with which to pay the license fee. The Commission has in other cases agreed to defer fee payments until a decision on a request for waiver or reduction is made.^{19/} The Commission should reach a similar decision in this case.

V. Conclusion

For the reasons set forth above, the Commission should grant SDI's request for a reduction of the application fee associated with its operation of TDRSS, and defer payment of any application fee until 30 days after the Commission issues a decision regarding the fee reduction.

Respectfully submitted,

SPACEDATA INTERNATIONAL LLC

By: 

Phillip L. Spector
Laura B. Sherman
Its Attorneys

^{17/} See Breder Letter.

^{18/} Gnowles Declaration.

^{19/} See, Letter to Latrice Kirkland, Esq. From Mark Reger, Chief Financial Officer, Federal Communications Commission, dated December 9, 1999 (citing Implementation of Section 9 of the Communications Act, 59 F.R. 30984, 30988 (June 8, 1994). See also Establishment of a Fee Collection Program to Implement the Provisions of the Omnibus Budget Reconciliation Act of 1989, 5 FCC Rcd. 3558 n.29 (1990) ("[applicants seeking deferrals will not be required to submit a provisional fee as the very nature of the request is based on an inability to do so]").

DECLARATION OF JAY GNOWLES

I, Jay Gnowles, declare under penalty of perjury that:

1. I am the President of SpaceData International, LLC ("SDI"), a Delaware limited liability company that was created in 1998 to develop SeismicStar, a project to transmit high-volume, high-speed data transmission from ocean-going seismic exploration vessels to data processing centers in the United States through NASA's Tracking and Data Relay Satellite System ("TDRSS").

2. To allow SDI to use TDRSS, NASA requires authority from the National Telecommunications and Information Administration of the Department of Commerce ("NTIA"). Since September 1999, NASA has been seeking such authority. NTIA,

however, has maintained the position that it is unable to grant such authority if SDI does not first have a license from the Federal Communications Commission ("FCC" or the "Commission"). It has taken most of a year to sort out these jurisdictional concerns and reach a conclusion on how to proceed. SDI was recently informed that it must seek a license for the operation of the TDRSS satellites that it plans to use.

3. SDI will use five of the six satellites in TDRSS. Under the Commission's rules, the filing fee for such use is \$447,300. SDI simply does not have, and cannot raise, that amount of money. If the fee is not waived and deferral of payment not granted, SDI will have to cease operations.

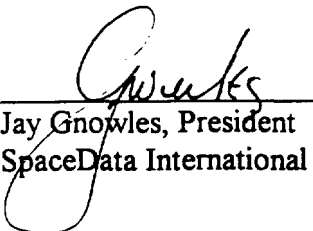
4. Because of the protracted delays in obtaining the authority to use TDRSS, SDI has found it difficult to attract new investors and has only generated \$120,000 through the sale of equity interests in the last six months. On March 14, 1999, SDI obtained additional revenue of \$100,000 upon the signing of a contract with Baker Hughes

Western Geophysical ("Western Geo") to install a transmitter on a Western Geo exploration vessel in order to test SeismicStar under actual ocean conditions. The contract with Western Geo provides for payment of an additional \$100,000 upon the installation of SeismicStar equipment and \$40,000 per month after testing actually commences. While SDI completed installation of the transmitter, Western Geo is withholding payment of the additional \$100,000, until SDI gains FCC approval.

5. Attached is a statement showing cash on hand and monies owed, salaries of the three highest paid officers (which are no longer being paid), as well as SDI's 1999 tax return and projections for the next 12 months. Since SDI is not yet in operation and has not generated any revenue, we do not have an accountant and do not generate standard cash flow statements or profit and loss statements. SDI has no outstanding bank loans and has not established (and has no immediate prospect of establishing) a line of credit with any bank or other financial institution. Other than two computers (which were purchased for \$13,000), SDI owns no saleable assets and currently leases from third parties the equipment it provided to Western Geo.

6. All cash derived from the sale of equity interests in SDI has been used to maintain the viability of SDI and pursue regulatory approval. As a result, SDI currently has access to slightly more than \$20,000 in cash. SDI has stopped paying employee salaries and currently has outstanding debts of approximately \$2.3 million. Finally, although SDI is currently in discussions with several potential strategic investors, it is too early to determine when, or if, significant capital will be invested. It is clear, however, that no capital will be invested until SDI receives the necessary regulatory approvals, including an FCC license.

7. As a result of the circumstances described above, SDI does not have the resources, nor can it obtain the resources, to pay the \$447,300 filing fee required for the its application to the FCC to operate TDRSS. However, once the FCC grants SDI the necessary license, payments under existing the contract and SDI's ability to enter into other contracts to provide SeismicStar will improve SDI's financial situation considerably. Furthermore, SDI hopes for substantial outside investment as a result of regulatory approval.


Jay Gnowles, President
SpaceData International LLC

August 4, 2000